

Application No. 09/768,912
Amendment dated: March 22, 2004
Reply to Final Office Action of February 13, 2004

REMARKS

Claim 9 has been amended and claim 25 has been added herein. Upon entry of this amendment, claims 9-12 and 25 will be pending in the above-identified application.

Section 102

Applicant respectfully requests reconsideration of the rejection of claims 9-11 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,862,167 (Sassa).

Claims 9-11 recite a semiconductor device comprising a single-crystal substrate made of a material different from nitride III-V compound semiconductors, wherein the substrate extends between a first surface and a second surface opposite the first surface and has a hole extending through the substrate from the first surface to the second surface, a device formed on one of the first and second surfaces of the single-crystal substrate using III-V compound semiconductors, and a layer disposed on one of the first and second surfaces of the single-crystal substrate, wherein the device is formed between the layer and the substrate and is electrically connected to the layer, and wherein an electrical connection to the device is created via the hole extending through the substrate and contact with the layer.

Sassa does not disclose or suggest a semiconductor device comprising a substrate extending between a first surface and a second surface opposite the first surface, a device formed on one of the first and second surfaces of the substrate, and a layer disposed on one of the first and second surfaces of the substrate, wherein the device is formed between the layer and the substrate. Rather, Sassa discloses a light-emitting diode or laser diode wherein an Si-doped GaN layer 3 is formed between a device (4, 5, and/or 6) and a substrate 1. Accordingly, the section 102 rejection is improper and should be withdrawn.

Section 103

Applicant respectfully requests reconsideration of the rejection of claim 12 under 35 U.S.C. 103(a) as being unpatentable over Sassa.

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Claim 12 recites recite a semiconductor device comprising a single-crystal substrate made of a material different from nitride III-V compound semiconductors, wherein the substrate extends between a first surface and a second surface opposite the first surface and has a hole extending through the substrate from the first surface to the second surface, a device formed on one of the first and second surfaces of the single-crystal substrate using III-V compound semiconductors, and a layer disposed on one of the first and second surfaces of the single-crystal substrate, wherein the device is formed between the layer and the substrate and is electrically connected to the layer, and wherein an electrical connection to the device is created via the hole extending through the substrate and contact with the layer. Claim 12 additionally recites the semiconductor device is an FET using nitride III-V compound semiconductors.

As discussed above, Sassa does not disclose or suggest a semiconductor device comprising a substrate extending between a first surface and a second surface opposite the first surface, a device formed on one of the first and second surfaces of the substrate, and a layer disposed on one of the first and second surfaces of the substrate, wherein the device is formed between the layer and the substrate. Furthermore, Sassa does not disclose or suggest an FET. Using an FET in place of the laser of Sassa is not an obvious engineering design choice without some suggestion in the prior art. In view of the above, the section 103 rejection is improper and should be withdrawn.

CONCLUSION

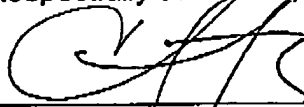
If the Examiner believes that there is any issue which could be resolved by an interview, please contact the undersigned attorney at the telephone number listed below.

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As the application is believed to be in condition for allowance, a favorable action and Notice of Allowance are respectfully requested.

Dated: March 22, 2004

Respectfully submitted,



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